In re Application of: Stopczynksi, Lawrence Gerard

Serial No.: 10/635,893

Response to 7/28/2004 Office Action

Customer Number 46796 Attorney Docket No.: FORD5

CLAIMS

Please enter the following clarifying amendments.

1. (Currently Amended) A method of controlling a sensor in an automotive vehicle, said method comprising the steps of:

establishing a <u>first</u> vehicle operational criteria associated with a <u>first</u> vehicle operational safety feature <u>and a second vehicle operational criteria associated with a second vehicle operational safety feature</u>:

determining a sensor beam coverage area for said <u>first and second</u> vehicle operational criteria or said <u>first and second</u> vehicle operational safety feature;

receiving a status parameter representing the operational status of said vehicle; and activating said sensor for scanning said sensor beam coverage area when said status parameter meets said vehicle operational criteria; and

simultaneously operating said first and second vehicle operational safety features.

- 2. (Original) The method of claim 1, wherein said sensor beam coverage area comprises from and side regions of said vehicle.
- 3. (Original) The method of claim 1, wherein said sensor includes a plurality of sensing beams for defining a frontal and side coverage area.

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- 4. (Original) The method of claim 1, wherein said sensor beam coverage area comprises a 180 degree coverage area from an origination point.
- 5. (Original) The method of claim 1, wherein said sensor beam coverage area comprises a 270 degree coverage area from an origination point.
- 6. (Original) The method of claim 1, wherein said status parameter represents a gear selected by an operator.
- 7. (Original) The method of claim 1, wherein said status parameter represents a speed of said vehicle.
- 8. (Original) The method of claim 1, wherein said operational safety feature comprises one of adaptive cruise control, parking assistance, pre-crash sensing or airbag prearming.
- (Original) The method of claim 1, wherein said vehicle operational safety feature is selected by an operator.
- 10. (Currently Amended) A method of controlling a sensor in an automotive vehicle having a plurality of frontal vehicle operational safety features and a plurality of side

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vehicle operational safety features to be activated depending on the presence of a remote

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object, said method comprising the steps of:

establishing a vehicle operational criteria associated with each of said plurality of

both frontal and side vehicle operational safety features;

determining a sensor beam coverage area for each of said plurality of vehicle

operational criteria or said frontal and side vehicle operational safety features, said sensor

beam coverage area comprising frontal and side regions of said vehicle;

receiving a status parameter representing the operational status of said vehicle; und

activating said sensor for scanning selected sensor beam coverage areas when said

status parameter meets one of said vehicle operational criteria, said sensor scanning said

selected sensor beam coverage areas on a time-interleaved basis; and

simultaneously operating said plurality of frontal vehicle operational safety

features and said plurality of side vehicle operational safety features.

(Original) 11. The method of claim 10, wherein said sensor beam coverage area

comprises a 180 degree coverage area from an origination point.

12. The method of claim 10, wherein said sensor beam coverage area (Original)

comprises a 270 degree coverage area from an origination point.

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13. (Original) The method of claim 10, wherein said status parameter represents a

gear selected by an operator.

14. (Original) The method of claim 10, wherein said status parameter represents a

speed of said vehicle.

15. (Original) The method of claim 10, wherein said vehicle operational safety feature

comprises one of adaptive cruise control, parking assistance, pre-crash sensing or airbag pre-

arming.

16. (Original) The method of claim 10, wherein said vehicle operational safety feature

is selected by an operator.

17. (Currently Amended) A method of controlling a sensor in an automotive

vehicle having a plurality of vehicle operational safety features to be activated depending on

the presence of a remote object, said method comprising the steps of:

providing a set of vehicle operational safety features corresponding to the presence of

frontal remote objects:

providing a set of vehicle operational safety features corresponding to the presence of

side remote objects;

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establishing a vehicle operational criteria associated with each of said plurality of frontal vehicle operational safety features;

establishing a vehicle operational criteria associated with each of said plurality of side vehicle operational safety features;

one of said frontal and one of said side vehicle operation criteria corresponding to the same vehicle operational criteria;

determining a frontal sensor beam coverage areas for each of said plurality of frontal vehicle operational criteria or frontal vehicle operational safety features;

determining a side sensor beam coverage areas for each of said plurality of side vehicle operational criteria or side vehicle operational safety features;

receiving a status parameter representing the operational status of said vehicle; and activating said sensor for scanning desired frontal and side sensor beam coverage areas when said status parameter meets one of said vehicle operational criteria; and

simultaneously operating said plurality of vehicle operational safety features.

18. (Currently Amended) A sensor for sensing a front and side of an automotive vehicle, said sensor comprising:

a housing;

a plurality of beams in said housing, each of said beams associated with a frontal or side coverage area, said coverage area including far, near, wide or narrow coverage; and

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a controller for activating said respective frontal and side beams depending upon the activation of said automotive vehicle; and

wherein said controller is adapted to simultaneously operate a plurality of vehicle operational safety modes in response to the activation of said automotive vehicle.

19. (Currently Amended) The sensor of claim 18, wherein one of said frontal or side beams is associated with the an operational status of said vehicle.